CHECKLIST FOR NUTRIENT STANDARD MENU PLANNING SOFTWARE PROGRAMS

Program Name:	_ Version number:
Company:	_ Contact:
Date:	

This checklist is intended to assist software developers in evaluating a software package to meet the specifications for Nutrient Standard Menu Planning (NSMP). This document does not replace the *School Food Service Software System Specifications* and Functional Requirements Document (specifications document) and may not include all aspects of the Specifications, but does provide a means of checking software programs for the major requirements in the specification document.

For further information about the specifications and requirements, refer to the specifications document, guidance documents, and other documents provided in the packet sent to software developers by USDA's Food and Nutrition Service. (Support documents, including the specifications and requirements, will soon be posted on the Healthy Meals Resource System web site at: http://healthymeals.nal.usda.gov.). Contact the Software Evaluation Coordinator for information about any recent updates to the requirements and with questions about the requirements for NSMP.

Food items, recipes, and menus are designed to test the functions and limits of the software and may not reflect actual data used in school food service.

		Meets Req (circle ye	
	all of the appropriate files and fields from the Child Nutrition Database available to the user? (last food in CN12 is CND# 29)	YES	NO
а	Standard reference foods? (Find Child Nutrition Database number (CND#) 1129, Egg, whole, cooked, hard-boiled).	YES	NO
b	USDA standardized recipe foods? (Find CND# 50175, Soup, Chicken Noodle, with carrots & parsley; with chicken broth, fresh carrots & celery, fresh onions, parsley flakes, seasonings, egg noodles & chopped chicken).	YES	NO
C	Commodity foods? (Find #4334, Oil, vegetable, type C (commodity))	YES	NO

d.	Manufacturer's food items? (Find #112680, Beans, Barbecued, Canned; 6/#10(108 oz); as purchased, #117207, Popcorn, Popcorn, white cheddar, smartfood[r] 24/2.375 oz; as purchased, #118385, Fully Cooked, BBQ Flavored Chickettes, Flavored Chicken Chip Pattie [New in CN11]	YES	NO
e.	Has the current release of the CN database been implemented correctly (food items added [#21413 Light Ice Cream, soft serve, blended with cookie pieces], modified [#118405– Carbohydrate 12.4 g; Calcium – 265.5mg; and Food Energy – 79.6 kcal per 100 grams], removed [#2056 Spice, Mint; leaves, fresh] since the previous release)?	YES	NO
f.	Does the program's database include the discontinued ("d") foods from the CN Database [#6910 Sauce, NESTLE, ORTEGA Nacho Cheese Sauce, ready-to-serve]?	YES	NO
g.	Includes food (FINCL) items? (Find # 1029, Include line #3, Cheese, mozzarella, sticks; #108861, Include line #1, Chicken Breast, Frozen; Ready to cook boneless, skinless fillet; as purchased; #114753, Include lines #2 & 3, Bacon, precooked, Hormel bacon topping, 1" dice (line #2)/1/2" dice (line #3) 2/5 lb, as purchased.	YES	NO
h.	Subcode food items (FSUBCD and FSUBDES)? [Find # 51094, – subcode #1000079Frankfurters,beef & pork,10/1, Grill Meat Franks (CN Approved);as purchased] Are subcode food items that are no longer in the CN Database removed from the program's database? [#112543, Subcode 2000649, Peppers, glass jars, sliced, peeled pimiento].	YES	NO
i.	Is the Buying Guide (BUYGD) information available as a reference in the ingredient entry (required) and recipe development (recommended) functions? Is the BYGDLNK file implemented for singular and multiple links [Buying Guide Code (BGC) 887 to CND# 1019; BGC 520, 523, 524 to CND#5188, and BGC 419 to CND#s 1012, 1014, 1015, 1016, 1036, 1037]?	YES	NO

j.	Are the measure descriptions and associated gram weights from the Gram Weights and Measure Descriptions File (WGHT), referred to as the Weights file, connected to the appropriate CN Database numbers and available at recipe development and menu planning? Is the full measure description available to the user? Is the user able to add measures for CN Database items? Is the source of the measure clearly defined (e.g. USDA vs. locally-added [user- or developer-added)?	YES	NO
k.	Are there appropriate length fields available, especially for description, ID# (CND#, or CND# and Include line #, or Subcode #), category, manufacturer, product code, and source of nutrient data (USDA, local, vendor) (See Systems Requirements and File Formats document)?	YES	NO
I.	Are the CND# (including Subcode # or Includes # where applicable) and full long description displayed whenever the user must select or fully identify a food item, e.g. menu planning and recipe development (recommend manufacturer, and product code, too)?	YES	NO
m.	Are food items categorized by USDA categories or other grouping system?	YES	NO
n.	Is there a system for the developer to update the software utilizing the date added, date modified, and status fields from the CN Database?	YES	NO
Ο.	Is the source of the item clear to the user? The user should be able to easily identify USDA items from the CN Database. Developer-added or user-added items should be identified as such.	YES	NO
p.	Is the user able to search for food items by description, CND#, and category?	YES	NO

2. Enter the following local food item for Biscuit with Egg and Ham.

Biscuit with Egg and Ham

Description: Biscuit w/egg & ham

Food ID#: 900000 Brand Name: Superior

Product Code: 123456789012345 Food Category: Breakfast Entree

Source of Nutrient Data: Manufacturer Fact Sheet Serving Weights and Measures: 1 biscuit = 192 g

Nutrients per 100 g:

WATER	54.66	g
CALORIES	230	Kcal
PROTEIN	10.64	g
FAT	14.08	g
CARBOHYDRATE	15.79	g
FIBER	0.07	g
ASH	2.31	g
CALCIUM	115	mg
IRON	2.37	mg
SODIUM	166	mg
VITAMIN A	125	RE
	455	IU
SAT. FAT	4.358	B g
CHOLESTEROL	156	mg

q.	Are error messages displayed whenever the user attempts to enter inappropriate information, e.g. the weight of components different from the base weight (+/- 10%), the caloric value calculated from grams of protein, fat and carbohydrate different from the total calories (+/- 10%), saturated fat greater than total fat)?	YES	NO
r.	Is the user able to enter both RE and IU values for Vitamin A?	YES	NO

- r. Is the user able to enter both RE and IU values for Vitamin A? If only one Vitamin A value is available, is the 1 RE to 5 IU conversion of the other value automatically calculated?
- s. Are there at least 5 digits and 3 decimal places available for entry of nutrient values?

NO

t.	Can the user enter the nutrient values per 100 g? Per serving size? Does the software automatically convert the nutrients per 100 g information to other standard measures (oz, lb, etc) during recipe development/menu planning?	YES	NO
u.	Can the user-entered nutrient values be edited?	YES	NO
٧.	Can the user-entered food item be deleted?	YES	NO
W.	Is the information provided by the CN Database regarding a food item locked? (The user should not be able to edit or delete CN Database data.)	YES	NO

3. Enter the following food item from the label information.

Low Fat Granola Bar

Description: Granola Bar, Low fat

Food ID#: 900001 Brand Name: Webster

Product Code: 234567890123451 Food Category: Snack Foods

Source of Nutrients Data: Manufacturer Food Label

Serving Weights and Measures: 1 bar = 21 g

Nutrients per serving (21 g):

CALORIES	90	Kcal	
	80	Nuai	
PROTEIN	2	g	
FAT	2.0	g	
CARBOHYDRATE	16	g	
FIBER	1.0	g	
SODIUM	60	mg	
SAT. FAT	0	g	
CHOLESTEROL	0	mg	
ASH	missin	g	
CALCIUM	0 %	DRV	
IRON	10 % DRV		
VITAMIN A	10 % DRV		

a.	Is the software able to convert %DRV (Daily Reference Value) to nutrient values per serving in appropriate units? Is user only able to enter %DRV for vitamin A in IU (not for RE)?	YES	NO
b.	Are nutrient values per serving able to be converted to nutrients/100 g?	YES	NO
C.	Are missing values marked as "missing" rather than as zero values on <u>all</u> nutrient analysis reports containing this product (recipes, menus, etc.)? Are missing values marked for missing values (blanks) for foods in the CN Database?	YES	NO

4.	4. Does the software automatically convert measures for weight and volume (if available) at all levels of item entry, recipe development, and menu planning?		YES		NO
	a.	Are all universal weights (oz, lb, g) available?	YES		NO
	b.	If one volume measure is provided, are all universal volumes (teaspoon, tablespoon, cup, pint, quart, and gallon) available?	YES		NO
	C.	Does the software automatically convert a smaller measure to a YES larger measure when appropriate (yield adjustment)?		NO	
	d.	Are fluid ounce, milliliter, and liter only used if a value is provided in the Weights file or entered by the user?	YES		NO
	e.	Is auxiliary information (information in parenthesis behind a Weights file measure description) removed or edited to be correct when the measure is converted or used as a multiple or fraction of this measure? For example, for CND# 1053 one weights file description is "cup, fluid (yields 2 cups whipped)". The "(yields 2 cups whipped)" is the auxiliary information and it becomes incorrect if the unit of measure is converted to other units of measure or a multiple/fractional amount is used.	YES		NO

5. Enter the following recipe for Salisbury Steak.

Salisbury Steak

Recipe Name: Salisbury Steak Recipe Code Number: 60003

Recipe Category: Main Dish, Entree Serving Weights and Measures: Number of Servings: 100 servings Serving Size/Description: 1 patty

Grams per serving: Software should calculate to 80 g.

Moisture Gain/Loss = -14%

Fat Gain/Loss = -5%

Type of Fat: CND# 4550, Shortening, frying (heavy duty), beef

tallow

Provides: 2.5 oz meat

Food Ingredients:

23567	Beef, ground, 85% lean/15% fat, raw	17 lb			
8120Cerea	als; oatmeal, regular, quick and instant, w/o fortification, dry, (oats)	1 lb + 8 oz			
1123Eggs;	whole, raw, fresh, frozen	10 1/2 oz			
14429	Water, Municipal	2 C			
6475Soup	Beef Broth or Bouillon, Powder, or granules prepared w/water	2 C			
1091Milk; (dry, skim, nonfat solids, regular, w/o added Vitamin A oz	4 1/2			
11284	Onions; dehydrated flakes	3.5 oz			
2029Parsley; dried 1/2 C					
2030Pepp	2030Pepper, Black 1 TB				

Preparation Instructions: Combine all ingredients and bake at 350 F.

a. Are there fields to enter the recipe name, recipe code number,

YES

NO

recipe category, number of servings (yield), serving size/description, grams per serving, food ingredient, ingredient measure/amount, percent moisture gain/loss, percent fat gain/loss, type of fat gained or lost, "provides" statement (optional), and preparation instructions?

b.		ser prompted or instructed to enter recipes using the actor Method for nutrient analysis purposes?		YES		NO
C.		ingredient sequence number and grams per serving tically calculated by the software?		YES		NO
d.		ntered information able to be edited/deleted? Can the ecipe be deleted?		YES		NO
e.		user search for the newly entered recipe by recipe name, code number, and category?		YES		NO
f.	number based of ingredie decimal	Recipe Report be printed which contains the recipe code, recipe name, serving/portion size, yield of the recipe on number of servings, ingredients, the amount of each ent in units appropriate for food service (fractions, not s), preparation instructions, and nutrient value of the per serving or per 100 g?		YES		NO
g.	the nutr	Recipe Nutrient Composition Report be printed containing ient value contributed by each ingredient and the total value of the recipe per serving? per 100 g?		YES		NO
h.		yield of the recipe be adjusted from 100 servings to 425 s? To 25 servings?		YES		NO
	i.	Does the base recipe remain intact so that rounding errors, which occur during yield adjustment, will not erode the base recipe?)	YES		NO
	ii.	Are the measures in the adjusted recipe appropriately rounded? Are measurement conversions accurate and appropriate?		YES		NO
	iii.	Is the format readable and understandable to food service employees?	YES		NO	
	iv.	Are fractions used instead of decimals?		YES		NO

	i.	recipes	a Recipe/Ingredient Cross Reference report that identifies that contain a certain food ingredient? Can the user by CND# and food item description?	YES		NO
	j.		USDA Recipes for Schools included as production recipesYES quired, but if the recipes are included, they will be d)?		NO	
		i.	If so, are the recipes linked to the nutrient analysis of the recipe in the Child Nutrition Database?	YES		NO
		ii.	Is the nutrient analysis from the CN Database used for calculating and displaying the nutrient analysis of recipes and menus?	YES		NO
		iii.	If the recipe is not linked, is the recipe entered using the Yield Factor Method for nutrient analysis purposes? Is the first ingredient used when there is a choice of ingredients? Are optional ingredients omitted?	YES		NO
		iv.	Is the USDA recipe locked? (User may create copies to edit recipes.) Is the source of the recipe listed as developer-added USDA recipe?	YES		NO
6.	data all r	abase (C equired	rient analysis of all food items and recipes in the N Database and local) be printed? Does the report list nutrients and the measure with which these nutrients ted (e.g. per 100 g, per serving, etc.)?	YES		NO

7. Create the attached menu for Key High School.

a.	Are there fields to enter cycle number, week, cycle day (1, 2, etc.), calendar day (Sun-Sat), month, calendar date, meal, location/site, age/grade, feeding figure (total number served), and the nutrient standard for age group and meal (e.g. Age 14-17 Lunch [1/3 of RDA for Lunch])?	YES	NO
b.	Can standard menu items (e.g. 300 servings Lowfat Milk, 100 servings Skim Milk, 100 servings Whole Milk) be added to all menus by copying a standard menu or globally adding food items? These items should be able to be placed on menus before adding other items, or added to existing menus.	YES	NO
C.	Can food items on a menu be edited/deleted?	YES	NO
d.	Copy the menu for Week 1 to Week 2. Copy a range of dates to another range of dates. Can you copy menus? Can you copy a range of dates? Can cycle menus be assigned to a calendar?	YES	NO
e.	Copy the menu to another site, e.g. Park Elementary, and assign the nutrient standard for lunch for ages 10-13 to the menus. Did the software accurately copy menus to appropriate dates? Could you assign a new nutrient standard? Can you change the feeding figure and number of servings for each menu item? Can you change the serving sizes for the lower age group?	YES	NO

8. Menu Reports should be able to be specified by school, cycle, month, week, day, meal(s), and/or date range.

a. Calendar Format--Can the menu be printed in a monthly calendar YES NO format to be distributed to students? Are menu items listed in appropriate format for a student population? Are the month, date, site/location, etc. listed? Can a 7-day (Sunday-Saturday) menu be produced?

b. Report Format--Is there a sequential listing of all menu items

YES

NO
served that can be printed by day, week, month, or date range?

9. Menu Production Report

	a. Can a report be printed for use by food service workers to determine the quantities and serving sizes of food to prepare for a specific site?	YES		NO		
	b. Does the report include the menu offered along with the portion size, projected serving amount of each menu item, total feeding figure, and identifying information (site, meal, etc.)?	YES		NO		
	c. Is the report in units, terms, and format easily understood by food service workers?	YES		NO		
use doe me rep ent	10. Missing Food/Recipe Item ReportDoes the software alert the user that an item being entered (or already entered) onto a menu, does not exist in the database (or does not contain nutrient or measurement information)? <i>OR</i> , is the software able to print a report (Exception Report) of food items and recipes that are entered onto menus or recipes, but are not contained in the database?					
11. Nu	rient Standards					
a.	Are the nutrient standards provided by USDA (Standard and Modified RDA data (age groups) sets, grade range standards, and age 51+ standards) incorporated into the software and available for comparison in nutrient analyses?	YES		NO		
b.	Can a new nutrient standard (e.g. age 9-13) be created, simply by entering the age or grade range of the new grouping (not by entering nutrient values)? Can the user create or select singleage or grade standards?	YES		NO		
C.	Are the nutrient values in the nutrient standards locked (unable to YES be changed)?		NO			
d.	Can you delete the user-added nutrient standards? (user should not be able to delete the USDA nutrient standard age/grade groups, but should be able to delete the user-added nutrient standard age/grade group.	YES		NO		

	e.	Can a report summarizing the nutrient standards for each meal and age group served at a particular site be printed? Can all nutrient standards be printed?	YES	NO
12.	. Me	nu Nutrient Analysis		
	a.	Can you complete a weighted nutrient analysis for Week 2 of the menu prepared for Key High School, Ages 14-17? Complete the weighted nutrient analysis and check for errors.	YES	NO
	b.	Does the program include a simple averaging function in which the developer automatically inputs the feeding figure and number of servings of each menu item? Does the program calculate a combined breakfast lunch nutrient analysis? (<i>Pre-defined simple averaging and combined breakfast lunch analysis are optional</i> , but if included, these functions must be checked.)	YES	NO
	C.	Menu's Nutrient Composition Comparison Report—Is there a report that summarizes the calculated nutritional value of an individual menu and compares each individual day's menu to a standard (not the average over a date range). Can this report be displayed and printed?	YES	NO
		i. Does the report show the percentage of the nutrient standard (for the specified meal and age group) met, and the discrepancy from the standard (the difference between the nutrient standard and the menu's actual nutrient value)?	YES	NO
		ii. Are meals and nutrients that do not meet the nutrient standard highlighted or marked, or is a separate report issued that lists meals and nutrients not meeting the nutrient standard?	YES	NO
		iii. Is the nutrient analysis of menus that contain food items with missing nutrient values (Day 1, Granola Bars) appropriately marked? (The total nutrient value should be marked with a code or symbol to indicate that some or all of the nutrient data was missing [not available]).	YES	NO
	d.	Meals Percentage Report—Is there are report that summarizes	YES	NO

the analyzed menus averaged over a specified range of days/dates, including one-week & two-week periods and compares the average to a specific nutrient standard. Can this report be displayed and printed?

i.	Does the report show the percentage of the nutrient standard (for the specified meal and age group) met, and the discrepancy from the standard (the difference between the nutrient standard and the menu's actual nutrient value)?	YES	NO
ii.	Are meals and nutrients that do not meet the nutrient standard highlighted or marked, or is an Exception Report issued?	YES	NO
iii.	Is the nutrient analysis of menus that contain food items with missing nutrient values (Day 1, Granola Bars) appropriately marked? (The total nutrient value should be marked with a code or symbol to indicate that some or all of the nutrient data was missing [not available]).	YES	NO

13. Are repo satu and, from	YES	NO	
а	. Is vitamin A shown in both RE & IU on nutrient analysis reports and displays for recipes and menus (both are recommended; if one is used, RE is preferred)? Prepare to show two units of measures for vitamin A, probably RAE and IU, in the near future.	YES	NO
14. Nutr sear conf func defic	YES	NO	
a.	Are users able to search for food items containing nutrients below, above, and/or between user-specified nutrient values?	YES	NO
b.	Are the food items displayed with the portion size and the actual value of the specified nutrient on the printed report?	YES	NO
C.	Can the user search for up to 5 nutrients at one time?	YES	NO
d.	Can the report be displayed on the screen and printed?	YES	NO
15.Trai	ning Documents		
а	. Are the User's Manual, Tutorials and Training Materials easy to understand by food service personnel?	YES	NO
b	. Is the information presented complete, sequential, and relevant to all functions of the software?	YES	NO
С	. Are examples of data entry or sample screens provided?	YES	NO
d	. Can a new user quickly learn how to perform all of the functions YES of the program utilizing the information in the documentation?	١	10

	e.	Are there any inconsistencies between screen prompts and documentation?	YES	NO				
16.Fu	16. Functional Requirements							
	a.	Is the program user-friendly? Is it easy to learn and perform functions?	YES	NO				
	b.	Are the displays and printouts formatted so that they are easy to read and comprehend?	YES	NO				
	c.	Are error messages and screen prompts understandable?	YES	NO				
	d.	Are there few system crashes, locked screens, etc.?	YES	NO				
17. Performance RequirementsDoes the program perform all functions within an appropriate time period?			YES	NO				
18. Memory Size and Hard Drive Requirements – Are the hard drive size and memory requirements compatible with hardware systems typically used by school food service?			YES	NO				
19. Data Recovery – Does the program have a method to back up and restore data?			YES	NO				

Lunch Menus

Site/Location: Key High School

Meal: Lunch

Age/Grade: 14-17 (9-12)

RDA Standard: 1/3 of RDA for Ages 14-17 Total Feeding Figure: 500

Cycle 1, Week 1

Dates: September 3-9, 2006

	CND#	Menu Item	Portion Size	# of Servings		
	Standard Milk Menu:			J		
	1079	Milk; lowfat, 2% fat, w/added vitamin A	1 c	300		
	1085	Milk; skim, w/added vitamin A	1 c	100		
	1077	Milk; whole, 3.3% fat	1 c	100		
	Sunday, September 3, 2006					
1)	23573	Beef, ground, 80% lean meat / 20% fat, patty, cooked, broiled (approximately 16.4% fat)	3 oz	350		
	50124	Salad, chicken; w/ dehydrated onions, mayonnaise (E-5)	1/2 c	150		
	18350	Hamburger or hot dog rolls/buns, plain	1 each	450		
		Granola bar, low fat	1 each	50		
		Catsup	1 tsp	350		
		Pickle relish, hot dog	1 tsp	200		
		Lettuce, (includes Boston & bibb), raw	1 Irg lea	f 500		
	11529	Tomatoes; red, ripe, raw	1/4 c	500		
	9046-	1 Dewberries; canned, heavy syrup, solids & liquid	1/2 c	225		
	9236	Peaches, raw	1 med.	275		
		Milk Menu				

Monday, September 4, 2006

2)	51056	Cheese blend, American, slices; School choice Pre-sliced Blend: American Cheese/American Cheese Substitute 50/50; 5#, 160 slices, as served (Schreiber Foods, #02-5093-40)	2 oz	300
	5013	Bread; wheat (includes wheat berry) Chicken meat, roasted Corn; sweet, yellow frozen, cooked, boiled, drained,	2 slices 3 oz	300 200
	11250 11529 9020	w/o salt Lettuce, (includes Boston & bibb), raw Tomatoes; red, ripe, raw Applesauce; canned, sweetened, w/o salt Bananas; raw Milk Menu	1/2 c 1 c 1/4 c 1/2 c 1med.	400 100 100 200 300
	Tu	esday, September 5, 2006		
,	60003 1000094	Biscuit w/egg & ham Salisbury Steak Potatoes, mashed, w/ vitamin C; Trio Mashed Potatoes with Vitamin C- Can, as purchased (Nestle Brands- #4013-2)(CND# 51252) Beans, green, fresh, cooked, boiled, drained w/o salt	1 each 1 patty 1 serving 1/2 c	200 300 3300 400
	18186	Cookies; peanut butter, commercially prepared, soft- type Apples; raw. w/ skin Milk Menu	1 each 1med.	300 200
	We	ednesday, September 6, 2006		
4)		Turkey; all classes, breast, meat & skin, cooked, baked Bread stuffing, bread; dried mix, prepared 1 c Peas; green, frozen, cooked, boiled, drained, w/o salt C-2, Crisp, apple; w/ rolled oats & butter Milk Menu	3 oz 500 1/2 c 1 piece	500 500 500

5) Thursday, September 7, 2006

1000087		Burger, vegetarian, with fortified soy protein concentrate; Pillsbury Green Giant Harvest Burgers,			
		Southwestern flavor (CND# 51078)	1 serving500		
		Hamburger or hot dog rolls/buns, plain	1 each	500	
		Catsup	1 tsp	500	
		Pickle relish, hot dog	1 tsp	500	
		Lettuce, (includes Boston & bibb), raw	1 lrg. lea		
		Tomatoes; red, ripe, raw	1/4 c	500	
	9131	Grapes; American type (with skin), raw	1/2 c	500	
6)	Fri	iday, September 8, 2006			
	50131	Salad, taco; w/ ground beef (24% fat), dehydrated			
	30131	onions & taco shell pieces (E-10)	1 salad	150	
	50240	Chicken Fajitas (D-40)	1 fajita	350	
		Beans, refried; w/canned pinto beans, chicken broth &	1/4 c	500	
		type c vegetable oil (I-15)			
	9191	Nectarines; raw	1 fruit	500	
		Milk Menu			
	•				
	Sa	turday, September 9, 2006			
7)	50147	Stromboli with tomato sauce; w/ all-purpose flour,	1 piece	300	
,		type C vegetable oil, & active dry yeast (F-6a)	·		
	50250	Lasagna, vegetarian (D-50)	1 piece	200	
	11091	Broccoli; fresh, cooked, boiled, drained, w/o salt	1/2 c	500	
	11409	Potatoes; frozen, french-fried, extruded, prepared,			
		heated/oven, w/o salt	10 strips		
	9200	Oranges; raw, all commercial varieties	1 med.	500	
		Milk Menu			